

REMARKS

In the Office Action dated May 5, 2005, claims 1-31 were presented for examination. Claims 1-31 were rejected under 35 U.S.C. §102(b) as being anticipated by *Kermani*, U.S. Patent No. 6,163,831.

The following remarks are provided in support of the pending claims and responsive to the Office Action of May 5, 2005 for the pending application.

In the Office Action dated May 5, 2005, the Examiner assigned to the application rejected claims 1-31 under 35 U.S. C. §102(e) as being anticipated by *Kermani* ('831). The *Kermani* patent ('831) relates to hardware elements for controlling access to shared synchronous memory. More specifically, *Kermani* shows a Pre-Arbiter (920) and multiple agents (100), (104), (106), and (108). The Pre-Arbiter (920) has direct access to the shared synchronous memory. Each of the agents can only access the shared synchronous memory under the control of the Pre-Arbiter and a switch. See Abstract. "A requesting agent presents a memory access request and a locking access request to the pre-arbiter 920 and then waits until the current owning agent experiences a lapse of, e.g., one clock cycle in its consecutive memory accesses. In that case, the locking agent disqualifies the current owning agent of the shared memory from its ownership at the point of the lapse and itself assumes ownership of the shared memory." Col. 11, lines 56-63. It is clear in *Kermani* that the requesting processor waits on an arbiter for a memory access request, see Col. 11, lines 39-46. The requesting processor does not wait for a lock using only local memory, since it is required to wait on the pre-arbiter, which is not local memory. Accordingly, there is no provision in *Kermani* for a lock which waits using only local memory.

Further, the lock in Applicant's invention may be in the form of an interruptible lock. An interruptible lock supports interrupting a thread waiting for a lock. Applicants define an interruptible lock in the Specification as follows: if the thread is interrupted by an interprocessor

interrupt, a hardware, interrupt, etc., while waiting for a lock, the thread will be removed from a queue and returned to the queue at a later time in order to gain access to the shared data. See Specification Page 12, lines 8-18. *Kermani* does not provide support for an interruptible lock, as defined by Applicants. Rather, *Kermani* teaches waiting for a period of inactivity by an agent in possession of a lock to gain access to memory. See Col. 11, lines 56-59, and Col. 12, lines 10-14. Accordingly, there is no provision in *Kermani* for an interruptible lock.

Under the law of anticipation, “[f]or a prior art reference to anticipate in terms of 35 U.S.C. §102, every element of the claimed invention must be identically shown in a single reference. *Diversitech Corp. v. Century Steps, Inc.*, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988). As mentioned above, *Kermani* does not show all of the elements as claimed by Applicant in pending claims 1-31. Specifically, *Kermani* does not show an interruptible lock and/or a lock which waits using only local memory as claimed by Applicant. Rather, *Kermani* shows a processor that waits on an intermediary called an arbiter until there is a period of inactivity. The arbiter and prearbiter are not local memory - they are hardware elements. Accordingly, *Kermani* clearly fails to teach the limitations pertaining to a lock which is interruptible and/or waits using only local memory as claimed and presented by Applicant’s pending claims 1-31.

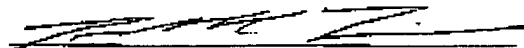
“A previous patent anticipates a purported invention only where, except for insubstantial differences, it contains all of the same elements operating in the same fashion to perform an identical function.” *Saunders v. Air-Flo Co.*, 646 F.2d 1201, 1203 (7th Cir. 1981) citing *Popeil Brothers, Inc. V. Schick Electric, Inc.*, 494 F.2d 162, 164 (7th Cir. 1974) (holding patents were not invalid as being anticipated by or obvious in light of prior art) (*emphasis added*). *Kermani* does not anticipate the invention of Applicants based upon the legal definition of anticipation. Although the prior art cited by the Examiner relates to a processor and a lock associated therewith, *Kermani* fails to show each and every element as presented in Applicant’s claimed invention. Accordingly, Applicant respectfully requests the Examiner to remove the rejection of claims 1-31 and to provide allowance of this application.

For the reasons outlined above, withdrawal of the rejection of record and an allowance of

this application are respectfully requested.

Respectfully submitted,

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